REMARKS

Claims 1 and 3-37 are all the claims presently pending in the application.

Applicants again affirm the election of claims 1-25 and 33-35 (Species I) for prosecution. Claims 26-32, 36, and 37 (Species II and III, respectively) are withdrawn from consideration as being directed to non-elected species of the invention.

Independent claim 1 is amended to incorporate the features of claim 2, which is correspondingly canceled without prejudice or disclaimer. Claims 1, 3, 5-7, 9-17, 19, 20, 22, 24, 25, 32, 33, and 34 have been amended merely to make editorial changes, thereby obviating the claim objections. Independent claims 17, 19, 33, and 34 also are amended to incorporate features that are somewhat similar to those recited in claim 2.

It is noted that the claim amendments are made only for more particularly pointing out the invention, and not for distinguishing the invention over the prior art, narrowing the claims or for any statutory requirements of patentability. Further, Applicants specifically state that no amendment to any claim herein should be construed as a disclaimer of any interest in or right to an equivalent of any element or feature of the amended claim.

Claims 2, 3-7, 14, 18, and 25 stand rejected under 35 U.S.C. § 112, first paragraph, and claims 1-16, 18, and 24 stand rejected under 35 U.S.C. § 112, second paragraph.

Claims 1-25 and 33-35 stand rejected under U.S.C. § 102(b) as being anticipated by Boyce et al., Special Edition Using Microsoft Office 97, pages 185-199 and 1017-1031, © 1997 (hereinafter "Boyce").

These rejections are respectfully traversed in the following discussion.

I. THE CLAIMED INVENTION

The claimed invention is directed to a method of reconciling component variables with container variables in a document.

In an illustrative, non-limiting embodiment as defined by independent claim 1, a method of reconciling component variables with container variables in a document, includes identifying component variables in a component, for each of the component variables, determining if there is a container variable in the container that refers to a same domain concept, if an identification is determined, associating the component variable in the component with the container variable in the container, and identifying a link expression of the component variable, and determining whether the link expression can be identified with an element in a domain model of the document.

Another exemplary embodiment, as defined by independent claim 17, relates to a method of automatically reconciling component variables with container variables in a document.

In another exemplary embodiment, as defined by independent claim 18, a method of interactively reconciling component variables with container variables in a document, includes displaying a component variable next to a representation of an element in a domain model of the document, identifying an association between the component variable and the element in the domain model, and matching the element of the domain model interactively by a user.

In another exemplary embodiment, as defined by independent claim 19, a system for reconciling component variables with container variables in a document relative to a domain model includes a container including a plurality of container variables, a component having a plurality of component variables in the document, and a reconciler for mapping container variables in the container, with component variables in the component.

In another exemplary embodiment, as defined by independent claim 33, a system for reconciling component variables with container variables in a document includes means for identifying component variables in a component, means for determining, for each of the component variables, if there is a container variable in the container that refers to a same domain concept, means, if an identification is determined, for associating the component variable in the component with the container variable in the container, means for identifying a link expression of said component variable, and means for determining whether the link expression can be identified with an element in a domain model of the document.

In another exemplary embodiment, as defined by independent claim 34, a signal-bearing medium tangibly embodying a program of machine readable instructions executable by a digital processing apparatus to perform a method of reconciling component variables with container variables in a document that is somewhat similar to the independent claims set forth above.

In another exemplary embodiment, as defined by independent claim 35, a signal-bearing medium tangibly embodying a program of machine readable instructions executable by a digital processing apparatus to perform a method of interactively reconciling component variables with container variables in a document that is somewhat similar to the independent claims mentioned above, including displaying a component variable next to a representation of an element in a domain model of the document.

In conventional document assembly systems, importation of document components is typically based on fixed criteria which presents problems for complex documents. For example, a particular clause may be reused throughout a document, and it may be integrated within a larger assembly of document components which is referred to as a "container" or "container assembly". There must be links between the container assembly and the document component

being imported during document assembly, and both items may contain variables which may refer to the same domain concepts (e.g., see specification at page 3, line 20 to page 4, line 5).

However, maintaining consistency between theses variables once the document component (source component) has been imported presents problems unless these variables representing the same concepts are somehow linked to one another. Hitherto the present invention, such a solution has not been provided and hence these problems have been prevalent (e.g., see specification at page 4, lines 6-10).

Instead, with the conventional systems and methods, there are simply container variables and components (e.g., see specification at page 5, lines 9-10).

In conventional systems, the component (independent of its content) that structures the variables together is not independent of the value assignment. As a result, no manual linking of these concepts is provided, and thus there is minimal (if any) flexibility and/or reusability of the components since the components are not generally applicable or generic (e.g., see specification at page 6, lines 1-5).

Further, there may be several different components in the document that all refer to the same concepts (e.g., the company's address is repeated in different places throughout the document). However, since in conventional systems the variables in the different components are not linked, if the company's address is changed in one location, it will not be updated elsewhere. This a serious maintenance problem that would be fatal to a system that relies heavily on component-based drafting (e.g., see specification at page 6, lines 6-12).

In the claimed invention, on the other hand, there are three concepts which are considered, including the position in the document where the component goes, the component itself that plugs in and out of the position in the document, and the particular domain model

information which plugs into the component. The novel and unobvious reconciler of the claimed invention allows a manual linking of these concepts, thereby allowing greater flexibility and greater reusability of the components because the components are more generally applicable (e.g., see specification at page 9, lines 11-18).

Thus, with the unique and unobvious features of the claimed invention, the user can reduce its database requirements, increase flexibility and reusability in that, for any given document component, the document component can be applied more generically to increase its reusability (e.g., more generically reusable). The user also can determine the linkages and leverage loose coupling of the domain knowledge and document knowledge. Further, the invention allows reconciliation to be performed interactively by the user (e.g., see specification at page 9, line 19, to page 10, line 3).

II. THE 35 U.S.C. §112 REJECTIONS

A. Claims 2, 3-7, 14, 18, and 25 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement.

Applicants respectfully submit that the ordinary skilled artisan could certainly make and use the claimed invention, as defined by claims 2, 3-7, 14, 18, and 25, of a method of reconciling component variables with container variables in a document, and a system thereof, after a thorough reading of the specification with reference to the drawings, and therefore, respectfully traverses this rejection.

The Examiner states that "[t]he claim(s) contain subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention" (see Office Action at page 9). Applicants respectfully disagree.

Applicants note that, as ample case law has held, the test for enablement is whether one of ordinary skill in the art could practice (e.g., make and use) the invention (e.g., the claimed invention), without undue experimentation.

Applicants respectfully submit that a *prima facie* case has not been established by the Examiner. That is, the Examiner has not established the specific reasons why one of ordinary skill in the art could not perform the claimed method, without undue experimentation.

The specification clearly describes, with sufficient detail to enable the ordinarily skilled artisan to make and use the invention, an exemplary process of identifying variables and linking variables according to the claimed invention (e.g., see specification at page 12, line 1, to page 17, line 10).

In view of the specific examples in the original disclosure and the drawings, Applicants respectfully submit that the ordinarily skilled artisan could certainly make and use the claimed invention of a method of reconciling component variables with container variables in a document, and a system thereof, after a thorough reading of the specification with reference to the drawings. In other words, one of ordinary skill in the art could practice (e.g., make and use) the invention, without undue experimentation.

It is incumbent on the Examiner to explain *why* it doubts the truth or accuracy of any statement in a supporting disclosure and to back up assertions of its own with acceptable evidence or reasoning which is inconsistent with the contested statement (e.g., see M.P.E.P. §

2164.04; see also In re Marzocchi, 169 USPQ 367, 370 (CCPA 1971)). Moreover, the Examiner should identify what information is missing (e.g., that which would not allow the ordinarily skilled artisan to perform the identifying, determining, associating, identifying, and determining of claim 1) and why one skilled in the art could not supply the missing information without undue experimentation (e.g., see M.P.E.P. §2164.04 and §2164.06(a)).

Applicants respectfully submit that mere conclusory statements do not meet the basic requirements for establishing a *prima facie* case of lack of enablement.

In view of the foregoing, the Examiner is respectfully requested to reconsider and withdraw this rejection.

B. Claims 1-16, 18, and 24 stand rejected under 35 U.S.C. § 112, second paragraph.

The claims are amended herewith to define more clearly the features of the present invention, thereby overcoming the rejection of these claims under 35 U.S.C. § 112, second paragraph.

However, with respect to claim 2, Applicants respectfully submit that the "element" and "variable" are clearly defined in the specification and that these terms properly should be interpreted in light of the specification (e.g., see specification at page 2, lines 17-20, page 3, line 20 to page 4, line 5). No additional limitations should be imported into the specification.

For at least the foregoing reasons, Applicants respectfully submit that claims 1-16, 18, and 24 are clear and definite, and therefore, respectfully request that the Examiner withdraw the rejection under 35 U.S.C. § 112, second paragraph.

III. THE PRIOR ART REJECTIONS

Claims 1-25 and 33-35 stand rejected under U.S.C. § 102(b) as being anticipated by Boyce et al., Special Edition Using Microsoft Office 97, pages 185-199 and 1017-1031, © 1997 (hereinafter "Boyce"). For at least the following reasons, Applicants respectfully traverse this rejection.

Independent claim 1 is amended herewith to incorporate the features of claim 2. Claim 2 is correspondingly canceled without prejudice or disclaimer.

Applicants respectfully submit that Boyce, like the conventional examples set forth in the specification, neither discloses nor suggests all of the features of the claimed invention. That is, in the context of claim 1, in Boyce there is not disclosure or suggestion of the claimed associating the component variable in the component with the container variable in the container, identifying a link expression of the component variable, or determining whether the link expression can be identified with an element in a domain model of the document.

For example, the specification describes that in the conventional systems and methods, if there were ten different types of addresses (e.g., in-line address, signature block address, county, etc.) for each person in a database (e.g., assume four thousand (4,000) persons' addresses), then a total of forty thousand (40,000) addresses would need to be stored in the data base. This would be true of the Boyce reference which also does not have the claimed associating the component variable in the component with the container variable in the container, identifying a link expression of the component variable, or determining whether the link expression can be identified with an element in a domain model of the document.

However, in an exemplary embodiment of the claimed invention which includes the claimed associating the component variable in the component with the container variable in the

container, identifying a link expression of the component variable, or determining whether the link expression can be identified with an element in a domain model of the document, only four thousand (4,000) addresses would have to be entered initially, while ten (10) address components also would be created, since the reconciler would link the desired address component (e.g., one of the ten (10) address components) to an address of the user's choice (e.g., one of the four thousand (4,000) addresses). Moreover, if a new format is desired, the original 4,000 addresses would not have to be changed but, instead, a new format merely created (e.g., eleven (11) address components and four thousand (4,000) addresses) (e.g., see specification at page 22, lines 19 to page 23, line 4.)

In other words, with the unique and unobvious features of the claimed invention, the user can reduce its database requirements while increasing flexibility and reusability since, for any given document component, the document component can be applied more generically to increase its reusability (e.g., more generically reusable). The user also can determine the linkages and leverage loose coupling of the domain knowledge and document knowledge. Further, the invention allows reconciliation to be performed interactively by the user (e.g., see specification at page 23, lines 5-11).

Applicants respectfully submit that the Boyce reference, like the conventional examples set forth in the specification, neither discloses nor suggests all of the features of the claimed invention, or for that matter, the advantages derived from such a novel and unobvious combination of elements.

For example, independent claim 1 recites, *inter alia*:

> identifying component variables in a component;
> for each of the component variables, determining if there is a container variable in said container that refers to a same domain concept;
> if an identification is determined, associating said component variable in the component with said container variable in the container; and
> identifying a link expression of said component variable; and
> determining whether the link expression can be identified with an element in a domain model of the document (emphasis added).

The Examiner alleges that Boyce discloses "identifying a link expression" by displaying an "*error message*" "*when the user changes the data source and the field names of the records in the selected Access database do not match the "merge fields" in the Word document*", and thus, that Boyce "identifies" a "link expression", as claimed (see Office Action at page 16). Applicants respectfully disagree.

Applicants respectfully submit that merely displaying an *error message* clearly does not disclose or suggest "identifying a link expression of said component variable; and determining whether the link expression can be identified with an element in a domain model of the document" as claimed in claim 1.

Thus, Boyce clearly does not disclose or suggest all of the features of the claimed invention in as complete detail as recited in independent claim 1, and accordingly, the rejection of claim 1 should be withdrawn.

On the other hand, with respect to independent claim 18, the examiner similarly alleges that, by displaying "*an error message*" when the field names of the records do not match the "merge fields" in the Word document, the Boyce reference discloses the claimed "displaying a

component variable next to a representation of an element in a domain model of the document", as recited in claim 18. Again, Applicants respectfully disagree.

That is, merely displaying an *error message* clearly does not disclose or suggest "displaying a component variable next to a representation of an element in a domain model of the document; identifying an association between the component variable and said element in the domain model; and matching said element of said domain model interactively by a user" as claimed in claim 18.

Thus, Boyce clearly does not disclose or suggest all of the features of the claimed invention in as complete detail as recited in independent claim 18.

Therefore, claim 18 is patentable over Boyce for this reason, as well as for somewhat similar reasons as those set forth above with respect to independent claim 1, and accordingly, the rejection of claim 18 should be withdrawn.

With respect to independent claim 17, Applicants respectfully submit that Boyce neither discloses nor suggests "automatically" reconciling component variables with container variables in a document, as claimed and described in the specification.

With respect to claim 19, Applicants respectfully submit that Boyce neither discloses nor suggests "a reconciler that maps container variables in said container, with component variables in said component", as claimed.

The Examiner alleges that the Boyce reference discloses that each "merge field" in the Word document is "mapped" to corresponding fields of each record in the Access data base. However, no where does Boyce disclose or suggest such a feature, nor does the Examiner cite any support for this feature in the Boyce reference.

Thus, Applicants respectfully submit that Boyce does not disclose or suggest all of the recitations of claim 19, and therefore, the rejection of this claim should be withdrawn.

Independent claims 33, 34, and 35 are patentable over Boyce for somewhat similar reasons as those set forth above with respect to claim 1. Claim 35 also is patentable over Boyce for somewhat similar reasons as independent claim 18.

Also, with respect to claim 33, the Examiner alleges that Boyce discloses "*the same "means" for reconciling component variables with container variable in that the method is performed by merging components of the Access database with the Word document*" (see Office Action at page 24).

However, the Office Action fails to identify any structure, equivalents thereof, or identity of function necessary for at least the claimed "means, if an identification is determined, for associating said component variable in said component with said container variable in the container" as claimed and described in the specification.

For the foregoing reasons, Applicants respectfully submit that Boyce neither discloses nor suggests all of the features of the novel and unobvious combination of elements recited in claims 1-25 and 33-35, and therefore, respectfully requests that the Examiner withdraw the rejection of these claims.

IV. CONCLUSION AND FORMALITIES

The Office Action objects to the specification for numerous reasons. The specification is amended herewith to obviate these objections. Therefore, Applicants respectfully request that the Examiner withdraw the objections to the specification.

The Office Action also objects to the drawings as not showing reference numerals 11 and 17. The specification is amended to remove reference numeral 17. However, with respect to reference numeral 11, Applicants submit that reference numeral 11 is clearly shown in the drawings, for example, in Figures 1, 3, and 4. For the foregoing reasons, Applicants respectfully request that the Examiner withdraw the drawing objections.

The Office Action further objects to the claims. The claims are amended herewith to obviate these objections.

However, with respect to claims 1 and 17 allegedly being duplicates of each other, Applicants respectfully disagree.

Claim 1 recites, *inter alia*, a "method of reconciling component variables with container variables in a document", while claim 17 recites, *inter alia*, a "method of automatically reconciling component variables with container variables in a document".

Applicants respectfully submit that the language of claims 1 and 17 clearly is different, and accordingly, that the scope of these claims clearly is different.

Thus, claims 1 and 17 clearly are not duplicative of each other and Applicants respectfully request that the Examiner withdraw the objection of claims 1 and 17.

For the foregoing reasons, Applicants respectfully request that the Examiner withdraw the objections to the claims.

In view of the foregoing, Applicant submits that claims 1-25 and 33-35, all the claims presently pending in the application, are patentably distinct over the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

The Commissioner is hereby authorized to charge any deficiency in fees or to credit any overpayment in fees to Assignee's Deposit Account No. 50-0510.

Respectfully Submitted,

Date: MAY 19, 2004

John J. Dresch
Registration No. 46,672

Sean M. McGinn
Registration No. 34,386

McGinn & Gibb, PLLC
8321 Old Courthouse Road, Suite 200
Vienna, VA 22182-3817
(703) 761-4100
Customer No. 21254

CERTIFICATE OF TRANSMISSION

I certify that I transmitted via facsimile to (703) 872-9306 the enclosed Amendment under 37 C.F.R. § 1.111 to Examiner William D. Hutton, Jr. on May 19, 2004.

John J. Dresch, Esq.
Registration No. 46,672

Sean M. McGinn, Esq.
Registration No. 34,386